## IN THE CLAIMS:

Please amend the claims as follows:

- 1. (Currently Amended) An integrated telecommunications network element comprising:
  - a plurality of add-drop-multiplexers, each multiplexer add-drop-multiplexer having one or more communications ports, each communications port carrying communications traffic that may include including one or more port tributaries:
  - a digital cross-connect configured to route communications traffic among the <u>port</u> tributaries;

and

- a controller configured to create one or more logical tributaries between the digital cross-connect and the <u>communications</u> ports by mapping one or more port tributaries into a logical tributary.
- (Original) The network element of claim 1 wherein:
   the controller is configured to route working traffic from a port through a logical tributary to the digital cross-connect.
- (Original) The network element of claim 2 wherein:
   the controller is responsive to one or more provisioning commands from a user by provisioning cross-connections between logical tributaries.
- 4. (Original) The network element of claim 2 wherein: the controller is responsive to a provisioning command from a user to provision working and protection paths from one port to another by determining the switching status of port tributaries.

- (Original) The network element of claim 2 wherein:
   the controller is responsive to one or more commands received from a user
   by establishing a port protection group.
- 6. (Original) The network element of claim 5 wherein: the controller is responsive to one or more provisioning commands from a user by determining whether a port associated with a particular port tributary is a member of a port protection group.
- (Original) The network element of claim 6 wherein:
   the controller is responsive to one or more provisioning commands from a user by determining what type of port protection group the port is a member of.
- 8. (Original) The network element of claim 6 wherein:
  the controller is responsive to one or more provisioning commands from a
  user by determining the state of protection switching.
- (Original) The network element of claim 2 wherein:
   the controller is responsive to one or more commands received from a user
   by establishing a path protection group.
- 10. (Original) The network element of claim 9 wherein: the controller is responsive to one or more provisioning commands from a user by determining whether a path associated with a particular port tributary is a member of a path protection group.
- 11. (Original) The network element of claim 10 wherein:

the controller is responsive to one or more provisioning commands from a user by determining what type of path protection group the port is a member of.

- 12. (Original) The network element of claim 10 wherein: the controller is responsive to one or more provisioning commands from a user by determining the state of protection switching.
- 13. (Original) The network element of claim 2 wherein: the controller is responsive to commands from a user directed toward a logical tributary by identifying a port tributary corresponding to the logical tributary.
- 14. (Original) The network element of claim 2 wherein: the controller is responsive to commands from a user directed toward a logical tributary by determining which of a plurality of port tributaries is to be employed as a working tributary.
- 15. (Original) The network element of claim 2 wherein:
  the controller is responsive to commands from a user directed toward a
  logical tributary by determining which of a plurality of port tributaries is to be
  employed as a protection tributary.
- 16. (Original) The network element of claim 2 wherein: the controller is responsive to a port access identifier by retrieving network equipment information from the access identifier.
- 17. (Original) The network element of claim 2 wherein:

the controller is responsive to a tributary access identifier by retrieving network equipment information from the access identifier.

- 18. (Original) The network element of claim 2 wherein: the controller is responsive to one or more user commands by establishing an atomic cross connection.
- 19. (Original) The network element of claim 2 wherein: the controller is responsive to one or more user commands by modifying a provisionable set of path protection groups.
- 20. (Original) The network element of claim 2 wherein: the controller is responsive to one or more user commands by provisioning a cross-connection between logical tributaries.
- 21. (Currently Amended) In a multi-port telecommunications network element, a method for switching traffic comprising the steps of:
  - A) receiving communications traffic at one communications port of a plurality of add-drop-multiplexers, each multiplexer add-drop-multiplexer having one or more communications ports, each communications port carrying communications traffic that may include including one or more port tributaries;
  - B) routing the communications traffic from a port tributary through a digital cross-connect configured to route communications traffic among the <u>port</u> tributaries:
  - C) a controller creating one or more logical tributaries between the digital cross-connect and the <u>communications</u> ports by mapping one or more port tributaries into at least one logical tributary; and

- D) the controller provisioning traffic among port tributaries in response to commands to provision traffic among logical tributaries.
- 22. (Original) The method of claim 21 wherein:
  - E) the controller routes working traffic from a port through a logical tributary to the digital cross-connect.
- 23. (Original) The method of claim 22 wherein:
  - F) the controller determines the switching status of port tributaries in response to a provisioning command from a user to provision working and protection paths from one port to another.
- 24. (Original) The method of claim 22 wherein:
  - G) the controller establishes a port protection group in response to one or more commands received from a user.
- 25. (Original) The method of claim 24 wherein:
  - H) the controller determines whether a port associated with a particular port tributary is a member of a port protection group in response to one or more provisioning commands from a user.
- 26. (Original) The method of claim 25 wherein:
  - I) the controller determines what type of port protection group a port is a member of in response to one or more provisioning commands from a user.
- 27. (Original) The method of claim 25 wherein:
  - J) the controller determines the state of protection switching in response to one or more provisioning commands from a user.

- 28. (Original) The method of claim 22 wherein:
  - K) the controller establishes a path protection group in response to one or more commands received from a user.
- 29. (Original) The method of claim 28 wherein:
  - L) the controller determines whether a path associated with a particular port tributary is a member of a path protection group in response to one or more provisioning commands from a user.
- 30. (Original) The method of claim 29 wherein:
  - M) the controller determines what type of path protection group the port is a member of in response to one or more provisioning commands from a user.
- 31. (Original) The method of claim 29 wherein:
  - N) the controller determines the state of protection switching in response to one or more provisioning commands from a user.
- 32. (Original) The method of claim 22 wherein:
  - O) the controller identifies a port tributary corresponding to the logical tributary in response to commands from a user directed toward a logical tributary.
- 33. (Original) The method of claim 22 wherein:
  - P) the controller determines which of a plurality of port tributaries is to be employed as a working tributary in response to commands from a user directed toward a logical tributary.
- 34. (Original) The method of claim 22 wherein:

- Q) the controller determines which of a plurality of port tributaries is to be employed as a protection tributary in response to commands from a user directed toward a logical tributary.
- 35. (Original) The method of claim 22 wherein:
  - R) the controller retrieves network equipment information from a port access identifier.
- 36. (Original) The method of claim 22 wherein:
  - S) the controller retrieves network equipment information from a tributary access identifier.
- 37. (Original) The method of claim 22 wherein:
  - T) the controller by establishing an atomic cross connection in response to one or more user commands.
- 38. (Original) The method of claim 22 wherein:
  - U) the controller modifies a provisionable set of path protection groups in response to one or more user commands.
- 39. (Original) The method of claim 22 wherein:
  - W) the controller provisions a cross-connection between logical tributaries in response to one or more user commands.